

# 2015 Water Quality Report

#### Is my water safe?

The Village of Whitehouse operates under a Green License to Operate (LTO) issued by the Ohio Environmental Protection Agency (OEPA). A green license means it was issued without any special conditions. The license number between the dates of January 1, 2015 and January 30, 2016 was #4801612-1007621-2015.

#### 2015 Disinfection Violation

The Village of Whitehouse is a Consecutive Water Distribution System which means the Village of Whitehouse receives finished drinking water from a wholesaler, the City of Toledo. As a Consecutive Water Distribution System the Village is required to notify our water customers of any disinfection violations at Toledo Water Treatment Plant or within the Village of Whitehouse water distribution system.

The City of Toledo Water Treatment failed to provide adequate contact time for approximately 7 hours on March 18, 2015. Inadequately treated water may contain disease—causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. The City of Toledo has taken the following step to correct the problem: the addition of chlorine feed application points at the clear well will ensure continuous chlorine feed.

# Do I need to take special precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing

chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

#### Where does my water come from?

The Village of Whitehouse receives Lake Erie water from the City of Toledo, through an agreement with the City of Toledo and Lucas County. During 2015, 161.579 million gallons (MG) passed through the Village. This was essentially the same consumption rate as in 2014. Our peak use day was October 2nd, at 1.188 MG. The water use by the village can be directly attributed to the diligent water conservation efforts of consumers during the summer months as well as throughout the year. The Village residents are to be commended on their water conservation practices.

#### Source water

Protecting drinking water is a top priority in Ohio. A 1995 statewide survey of citizens indicated that Ohioans rank drinking water quality as one of the top three environmental concerns facing Ohio. Another statewide survey conducted in 1998 indicated that 90% of Ohioans consider the quality of drinking water to be a "very important" water resource issue. This was the highest ranking of any water resource issue rated in the survey. Beginning in the 1970s, federal environmental laws were passed to address the need for reliable supplies of safe drinking water, primarily by cleaning up contaminated air, soil, and water. In 1986 the Safe Drinking Water Act established health and treatment standards for public drinking water systems. Environmental goals at the national, state, and local levels are now shifting to protecting resources from potential future damage. Because safe drinking water is a necessity to everyone, protecting this valuable resource is a primary goal. Thanks in part to drinking water treatment, design of treatment systems, certification of plant operators, and regulations on contaminants, public water systems in this country set the world standard for providing safe drinking water to the public.

The Village of Whitehouse uses surface water drawn from Lake Erie as the source of our drinking water. Lake Erie is a part of the Great Lakes watershed. Ninety-five percent of the water entering Lake Erie comes from the upstream Great Lakes - Superior, Michigan, and Huron as well as all the rivers and streams that flow into these Lakes. The remaining 5% comes from rain and snow in the Lake Erie drainage basin which includes the various streams and rivers that flow into Lake Erie. By their nature, surface waters, such as lakes and rivers, are accessible and can be contaminated by chemicals and disease causing organisms. Since the City of Toledo intake system is located at a considerable distance offshore, potential contamination from rivers, streams, and other nearby sources is greatly minimized, but no single treatment process can address all possible contaminants. Additionally, implementing measures to protect Lake Erie information water quality. More can found our http://water.epa.gov/lawsregs/lawsguidance/cwa/criteria/gli/index.cfm

# **Source Water Protection Tips**

Protection of drinking water is everyone's responsibility.

There are several key ways that area residents and businesses can help protect Lake Erie.

- Remove trash and debris from sewers and storm sewers.
- Prevent soil erosion by planting trees, grass or shrubs along streams and rivers.
- Eliminate excess use of lawn and garden fertilizers and pesticides they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- If you have your own septic system, properly maintain your system to reduce leaching to water sources or consider connecting to a public water system.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. The watershed protection organization in your community is The Swan Creek Watershed. Information on the watershed can be found at: <a href="http://www.epa.ohio.gov/dsw/tmdl/MaumeeRiver.aspx">http://www.epa.ohio.gov/dsw/tmdl/MaumeeRiver.aspx</a> volunteer to help.
- Organize a storm drain education project with your local government or water supplier. Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.

For more information, visit U.S. EPAs website at: http://cfpub.epa.gov/safewater/sourcewater

# Water Distribution System Security- REPORT SUSPICIOUS ACTIVITY

The Village of Whitehouse takes the security of our community water distribution and waste water collection system seriously, however the very nature of these systems leaves them vulnerable to numerous threats, both intentional and unintentional, which have the potential to impact water quality and waste water processes. Tampering with the distribution system or collection system, including unauthorized use of fire hydrants, is a violation of Federal, State and local laws. Only authorized Village of Whitehouse Public Works and Fire Department employees are authorized to operate fire hydrants. Only Village of Whitehouse Public Works personnel or appointed representatives are authorized to perform repairs and/or maintenance duties on the distribution or collection systems. This includes in the water distribution system; all valve stations, water towers, distribution mains, service lines, curb stops and water meters, in the collection system; all pumping stations, man holes, sewer mains and sewer taps or connections to sewer mains.

#### PLEASE REPORT SUSPICIOUS ACTIVITY IMMEDIATELY BY CALLING 911

#### Why are there contaminants in my drinking water?

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791). The sources of drinking water (both tap water and bottled water)

include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity: microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife; inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming; pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses; organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems; and radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities. In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

#### How can I get involved?

Public participation and comment are encouraged at regular meetings of Whitehouse Village Council which meets on the first and third Tuesday of every month at 7:00 p.m. in Council chambers at the Village Hall located at 6925 Providence Street, Whitehouse Ohio.

#### **Backflow Prevention**

Backflow is a serious threat to all water systems, public or private. Backflow occurs when an apparatus attached to a distribution system becomes submerged, and the distribution system suddenly loses pressure. This drop in pressure could allow chemicals or bacteria to enter into a distribution system potentially causing severe illness or even death.

The Village of Whitehouse encourages all residents to follow these simple backflow prevention measures:

- Never submerge hoses in buckets, pools, tubs or sinks. Keep the end of the hose clear of possible contaminants.
- Do not use spray attachments without a backflow prevention device.
- Purchase and install inexpensive backflow prevention devices for all threaded faucets around your home. They are available at hardware stores and home-improvement centers.

Additionally the Village of Whitehouse requires all residential or commercial water accounts with irrigation systems to install a backflow prevention device immediately after the water meter, and may require a backflow prevention device on any water service line, commercial or residential as deemed necessary by the Director. Ohio Administrative Code3745-95-06 2 states:

It shall be the duty of the water consumer to maintain any backflow prevention device required by rules 3745-95-04 and 3745-95-05 of the Administrative Code in proper working order and in continuous operation.

- (1) The supplier of water shall retain authority over any backflow prevention device required by rules 3745-95-04 and 3745-95-05 of the Administrative Code.
- (2) It shall be the duty of the supplier of water to see that the tests and inspections required under this paragraph are made.
- (3) The consumer shall, on any premises on which backflow prevention devices required by rules 3745-95-04 and 3745-95-05 of the Administrative Code are installed, have thorough inspections and operational tests made of the devices at the time of installation or repair, and as may be reasonably required by the supplier of water or the director, but in all cases at least once every twelve months. These inspections and tests shall be at the expense of the water consumer and shall be performed by the supplier of water or a person approved by the supplier as qualified to inspect and test backflow prevention device.
- (4) These devices shall be repaired, overhauled or replaced at the expense of the consumer whenever they are found to be defective.
- (5) Records of such inspections, tests, repairs and overhaul shall be kept by the consumer and made available to the supplier of water.

# **Water Conservation Tips**

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference – try one today and soon it will become second nature.

- Take short showers a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.

- Teach your children about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!
- Encourage young minds to learn where their drinking water comes from. http://water.epa.gov/learn/kids/drinkingwater/index.cfm
- Visit <u>www.epa.gov/watersense</u> for more information.

#### Water Emergency Number - 911

The Village has established an emergency phone number to call for after hours, weekends and holidays. The emergency number to call for non-business hours is 911. This will put you in contact with a dispatcher from Lucas County, who will in turn contact the proper personnel to respond to the emergency. Reminder stickers are available at the Village of Whitehouse.

#### Additional Information for Lead

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Village of Whitehouse is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

#### For more information please contact:

Contact Name: Steven P. Pilcher

6925 Providence St. Whitehouse, OH 43571 Phone: 419-877-5383

E-Mail: spilcher@whitehouseoh.gov Website: <u>www.whitehouseoh.com</u>



# **Water Quality Data Table**

The table below lists all of the drinking water contaminants that were detected by the Toledo Water Treatment Plant and/or the Village of Whitehouse during the calendar year of this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The Ohio EPA requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

Regulated Contamina	MCLG	MCL,			4 18		BY STOP	CAN STUDIO CONTRACTOR OF THE PARTY OF THE PA
	or	TT, or	Your	Ra	nge	Sample		
Contaminants	MRDLG		Water			Date	Violation	Typical Source
isinfectants & Disinfectar	it By-Pro	lucts		w best		Sta. N		
There is convincing evidence	ce that add	ition of a	disinfe	ctant is	neces	sary for c	ontrol of r	nicrobial contaminants)
organic Parameters								<b>经过来的证据的</b>
Barium (ppm)	2	2	0.01	na	na	2015	No	Erosion of natural deposits, discharg from drilling wastes and metal refineries.
Chlorite (ppm)	0.5	1	0.371	0.053	0.5	2015	No	By-product of drinking water disinfection
Fluoride (ppm)	4	4	1.05	0.82	1.17	2015	No	Water additive which promotes strong teeth.
Nitrate [measured as Nitrogen] (ppm)	10	10	4.06	ND	4.06	2015	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion contural deposits
ynthetic organic Paramet	ers includ	ing pest	icides a	nd her	bicides			
Atrazine (ppb)	3	3	0.089	ND	0.089	2015	No	Runoff from herbicide used on row crops
Simazine (ppb)	4	4	0.06	ND	0.06	2015	No	Herbicide runoff
olatile Organic Paramete	rs							
TTHMs [Total Trihalomethanes] (ppb) <sup>1</sup>	0	80	69.4	28.5	123	2015	No	By-product of drinking water disinfection
Haloacetic Acids (HAA5) (ppb) 1	0	60	18.8	10.2	31.6	2015	No	By-product of drinking water chlorination
Iicrobiological Paramete	rs							
otal Coliform Bacteria	0	1*	0	0	0	2015	No	Naturally present in the environment
	*Systems t	hat colle	ct fewer	than 4	0 samp	oles per n	nonth, 1 m	onthly positive sample.

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL		Ra Low	nge High	Sample Date	Violation	Typical Source
Microbiological Paramete	ers (Cont.)							
Turbidity (ntu) <sup>2</sup>	None	TT	0.24	0.04	0.24	2015		Soil runoff, suspended material in lake water.
Total Organic Carbon <sup>3</sup> (% Removal)	NA	TT	3.02	2.58	3.87	2015	No	Naturally present in the environment
Residual Disinfectants			Sydige:					
Chlorine (as Cl2) (ppm)	4	4	1.1	0.62	1.27	2015	NO	Water additive used to control microbes
Chlorine Dioxide (ppm)	0.8	0.8	0.5	<0.2	0.5	2015	No	Water additive used to control microbes

- 1 TTHM stands for Total Trihalomethanes. HAA5 stands for Haloacetic Acids. MCL compliance for both TTHM and HAA5 is based on the highest annual average (shown as level found). The range shows the highest and lowest single detects from quarterly compliance monitoring in the distribution system.
- 2 Turbidity is a measure of the cloudiness of the water. We monitor it daily because it is a good indication of the effectiveness of our filtration system. The turbidity limit set by the EPA states that all samples must be below 1 ntu and that 95% of the daily samples must be lower than 0.3 ntu. In 2015, 100% of treatment plant samples were below 0.3 ntu.
- 3 TOC stands for Total Organic Carbon. The value reported under "Level Found" for TOC is the running annual average ratio between the percentages of TOC actually removed to the percentage of TOC required to be removed. A value of great than one (1.0) indicates that the water system is in compliance with TOC removal requirements. A value of less than one indicates a violation of the TOC removal requirements. The value reported under the "Range" for TOC is the lowest monthly ratio to the highest monthly ratio. Toledo Water Treatment Plant remained in compliance with TOC removal requirements.

### **Cryptosporidium Information**

In 2015, 18 samples were taken from Toledo's raw water supply. Cryptosporidium was not detected in any of these samples

Radioactive Testing						140,000		
	MCLG			Range			1	= 3 n n ; ;u
Contaminants	-	MCL	Your Water	Lo	High	Sample Date	Violation	Typical Source
Alpha (piC/L)		1	8	178	1.	2015	No	Erosion of natural deposits
			Your	Samp	le	# Samples	Exceeds	
<u>Contaminants</u>	MCLG	AL	Water	Dat		xceeding AL	<u>AL</u>	Typical Source
Copper and Lead Testin	g				Rich			
Copper - action level at consumer taps (ppm)	1.3	1.3	0.054	2014	4	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
	Zero out 1.3 ppm.		enty san	nples v	was fo	ound to have co	opper levels in excess	of the copper action level of
Lead - action level at consumer taps (ppb)	0	15	0	2014	4	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
	Zero out	of two	enty san	nples v	vas fo	ound to have lea	ad levels in excess of	the lead action level of 15

Copper and lead testing is only required every three years. Compliance for copper and lead is based on the 90<sup>th</sup> percentile, where 9 out of 10 samples must be below the action level (AL). Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels in your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791) or <a href="https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water">https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water</a>

This table shows the results from 2013 Unregulated Contaminants Rule 3 (UCRMR3) results. These results will assist the USEPA in developing new regulatory requirements to protect the public health and safety. Any contaminant found in the UCMR3 quarterly sampling will not have a MCLG or MCL and will be listed below:

	l	Unregulated	Contaminants	in Drinking Water
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Parameter	Sample Year	Units	Level Found	Range	MCLG	MCL	Violation?
Chromium, Hexavalent	2013	ppb	0.232	.0190232	NA	NA	No
Chromium, Total	2013	ppb	0.24	0.20-0.24	NA	NA	No
Chlorate	2013	ppb	100.0	39.6-100	NA	NA	No No

Sodium (ppm) <sup>4</sup>	2015	ppm	32,4	6.8 – 32.4	N	Io	Naturally occurring
Parameter	Sample Year	Units	Level Found	Range	Viola	ation	Likely Sources
ier Unregulated Contam	inants Monitori	ng					
Vanadium, Total	2013	ppb	.85	0.42385	NA	NA	No
Strontium, Total	2013	ppb	151.0	0.086-151	NA	NA	No
Molybdenum, Total	2013	ppb	2.11	ND-2.11	NA	NA	No

<sup>4 -</sup> This information is provided for those concerned with sodium in their diet; 32.4 mg/l of sodium equates to 7.57 milligrams of sodium per 8 ounce glass of water.

Parameter	Sample Year	Units	Level Found	Range	Threshold	Likely Sources
Microocystin <sup>5</sup>	2015	ppb	ND			Toxins produced by harmful algal blooms

<sup>5 -</sup> Microsystin is a toxin produced by harmful algal blooms. The following thresholds were developed by the United States Environmental Protection Agency (USEPA). The 0.3 ppb Do Not Drink Advisory Threshold is for children 6 and under; while the 1.6 ppb Do Not Drink Advisory Threshold is for anyone 6 years of age and older. For more information on Harmful Algal Bloom Response Strategy go to: <a href="http://epa.ohio.gov/portals/35/hab/HABResponseStrategy.pdf">http://epa.ohio.gov/portals/35/hab/HABResponseStrategy.pdf</a>

# Unregulated Contaminates in Distribution System (City of Toledo)

Parameter	Sample Year	Units	Level Found	Range	MCLG	MCL	Violation
Chromium, Hexavalent	2013	ppb	0.26	0.21-0.26	NA	NA	No
Chromium, Total	2013	ppb	0.389	0.21-0.389	NA	NA	No -
Chlorate	2013	ppb	111	43.4-111	NA	NA	No
Molybdenum, Total	2013	ppb	2.2	1.2-3.0	NA	NA	No

Strontium, Total	2013	ppb	169	98-200	NA	NA	No
Vanadium, Total	2013	ppb	.82	.50282	NA	NA	No

For more information on UCMR3 go to: <a href="http://water.epa.gov/lawsregs/rulesregs/sdwa/ucmr/ucmr3/basicinformation.cfm">http://water.epa.gov/lawsregs/rulesregs/sdwa/ucmr/ucmr3/basicinformation.cfm</a>

Unit Descriptions	
Term	Definition
ppm	ppm: parts per million, or milligrams per liter (mg/L) or one ounce in 7,350 gallons of water.
ppb	ppb: parts per billion, or micrograms per liter (µg/L) or one ounce in 7.350,000 gallons of water.
NA	NA: Not applicable
ND	ND: Not detected
NR	NR: Monitoring not required, but recommended.
ntu	Neophelometric Turbity Unit – A measurement of scattered light particle in water.  Used to measure the quantity of particles (cloudiness) in a given amount of water.  (A measure of water clarity.)

Important Drinking Water Definitions	
Term	Definition
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
MCL	MCL: Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
MCLG	MCLG: Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
MNR	MNR: Monitored Not Regulated

MPL	MPL: State Assigned Maximum Permissible Level
MRDL	MRDL: Maximum residual disinfectant level. The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
MRDLG	MRDLG: Maximum residual disinfection level goal. The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
Thresholds	Recommended levels of unregulated contaminants not to exceed. If levels are exceeded this will generate a form of response or course of action.
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
Picocuries per liter (piC/l)	Common measurement of radioactivity.
СТ	Contact Time required to deactivate microbes with chlorine.